

**VOLTAGE CONTROLLED OSCILLATORS WITH
SELECTABLE OSCILLATION FREQUENCIES AND METHODS FOR
ADJUSTING THE SAME**

ABSTRACT OF THE DISCLOSURE

5 Voltage controlled oscillators include an amplifier that generates an oscillation
output signal having an oscillation frequency based on an applied inductance and
capacitance. An inductor coupled to the amplifier applies the inductance. A switched
capacitor circuit includes a plurality of switches and capacitors selectably coupled to
the amplifier through respective ones of the switches. A switched varactor circuit
10 includes a plurality of switches and varactors selectably coupled to the amplifier
through respective ones of the switches. The capacitances of the varactors are
responsive to an applied control voltage. A control circuit is configured to select ones
of the switches of the capacitor circuit and of the varactor circuit and to provide a
selected control voltage to the varactor circuit to apply a desired capacitance to the
15 amplifier.

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